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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,223	01/10/2006	Timothy S. Coombs	COOT 8682W1	7593
1688 7590 12/30/2009 POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615				
EXAMINER				
HURLEY, SHAUN R				
ART UNIT		PAPER NUMBER		
3765				
MAIL DATE		DELIVERY MODE		
12/30/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,223

Applicant(s)

COOMBS, TIMOTHY S.

Examiner

Shaun R. Hurley

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-18, 49, and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the language “the outer portion covering from 70% to 100% of the surface of the inner portion” is confusing. Nowhere in Applicant’s specification is this taught. What Applicant’s specification does teach is that “Optimal ***double helix wrap*** coverage is between 70% and 100%” (emphasis added). Claim 1 does not teach a double helix, as evidenced by claim 14. Likewise claim 49, which only claims one helix.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 14, 15, and 42, to the degree definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Guevel et al (4840021).

Guevel teaches a yarn (Figures 4) comprising an inner portion of staple plastic fibers (4) spun over a core strand (3), and an outer portion comprising a multifilament helically wrapped yarn (5), as well as the method of forming.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 3, 5-13, 16-18, 20-41, and 43-50, to the degree definite, are rejected under 35 U.S.C. 103(a) as being unpatentable over Guevel et al in view of Pepin (5487941).

Guevel essentially teaches the invention as detailed above, including the use of any suitable materials, but fails to specifically teach that the fibers are recycled PET, incapable of passing through a twenty micron opening without clogging. Pepin, however, teaches us that using such recycled fibers, inherently possessing such an inability of passing, from beverage bottles in a yarn structure is well known (Column 9, lines 41-42). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have utilized the recycled PET fibers of Pepin in the yarn of Guevel, so as to create a useful yarn while repurposing waste materials in a beneficial manner. Pepin shows that such fibers are well suited for use in yarn structures, and Guevel teaches a structure capable of and open to using such recycled fibers. In regards to the myriad of outer wrap structures claimed by Applicant, including double sheaths, double wrap yarns, monofilament yarns, and such, all are obvious type variants of that taught by Guevel which provide the same basic function; providing a desired degree of protection to the core subcomponents. The ordinarily skilled artisan would be more than capable of deciding which of the many well known structures to use, dependent on end use. In regards to the subsequent strength requirements of the materials, those are inherent properties of the obvious

materials selected, all well known in the art. Applicant major inventive step, the use of recycled PET fibers, is addressed by the combination as detailed.

Response to Arguments

7. Applicant's arguments filed 10 September 2009 have been fully considered but they are not persuasive.

Applicant argues that claim 1 does not teach recycled plastic. Examiner's position is that nothing in the claims defines what is meant by recycled, and that such language is considered product by process, resulting in a material, the same as Guevel. In regards to Applicant's arguments that Guevel does not teach differing materials, T712 and T132 most certainly are different materials. Yes both are polyesters, but they are different. Likewise Guevel teaches that any material may be used in his inventive yarn components. In regards to Applicant's amendment concerning coverage percentages, Examiner has addressed such above.

Applicant argues that claim 42 fails to teach an intermediate yarn, which Examiner disagrees with. Specifically, the core of the yarn **MUST** be introduced before the wrap. This is an absolute, as there is no manner in which to introduce the core afterwards, since the wrap keeps the yarn together. Thus in the moment before the introduction of the wrap, an intermediate yarn most certainly is created.

In regards to Applicant's comments regarding the 103 rejections, Applicant makes no formal argument against the art other than to state that he deserves a patent. Examiner's position is that as written, the claim language is quite broad and currently unpatentable.

In regards to Applicant's arguments concerning claims 20-50, Applicant's arguments that "it is certainly not shown or suggested by the cited art" are not proper responses.

Applicant's claims are extremely broad, with all yarn structures claimed well known variants in the art. Likewise the apparatus used to produce the yarn are well known and were not created or invented by Applicant. Applicant's arguments state that his inventive step, his discovery, is that he has found a way to produce a yarn with recycled PET yarn that overcomes poor hand, abrasion resistance and strength. The problem is, he specifically states "... the broad concept of using recycled PET in a yarn is old". This is a problem, because if the broad concept of using recycled PET in a yarn is old, and Applicant continues to file nothing but broad claims for recycled materials in yarn, there is nothing Examiner can do but reject the claims.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun R. Hurley whose telephone number is (571) 272-4986. The examiner can normally be reached on Mon - Fri, 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shaun R Hurley
Primary Examiner
Art Unit 3765

SRH
29 December 2009

/Shaun R Hurley/
Primary Examiner, Art Unit 3765